

Upgrade  
Instructions

# hp StorageWorks Edge Switch 2/24 Flexport

Third Edition (September 2004)

**Part Number:** AA-RTDHE-TE/958-000286-004

These instructions describe how to install the 8-flexport upgrade kit in an Edge Switch 2/24.



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Printed in the U.S.A

Edge Switch 2/24 Flexport Upgrade Instructions  
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## About This Guide

These flexport upgrade instructions provide information to help you:

- Install the 8-flexport upgrade kit for the HP StorageWorks Edge Switch 2/24.
- Obtain and configure a required feature key.

“About this Guide” topics include:

- [Overview](#), page 6
- [Conventions](#), page 7
- [Rack Stability](#), page 9
- [Getting Help](#), page 10

## Overview

This section covers the following topics:

- [Intended Audience](#)
- [Related Documentation](#)

## Intended Audience

This book is intended for use by administrators who are experienced with the following:

- Fibre Channel technology
- HP StorageWorks Fibre Channel switches

## Related Documentation

For a list of corresponding documentation, see the Related Documents section of the *HP StorageWorks Edge Switch 2/24 Release Notes*.

For the latest information, documentation, and firmware releases, please visit the HP StorageWorks website:

<http://h18006.www1.hp.com/storage/saninfrastructure.html>

For information about Fibre Channel Standards, visit the Fibre Channel Industry Association website, located at <http://www.fibrechannel.org>.

## Conventions

Conventions consist of the following:

- [Document Conventions](#)
- [Text Symbols](#)
- [Equipment Symbols](#)

## Document Conventions

This document follows the conventions in [Table 1](#).

**Table 1: Document conventions**

Convention	Element
Blue text: <a href="#">Figure 1</a>	Cross-reference links
<b>Bold</b>	Menu items, buttons, and key, tab, and box names
<i>Italics</i>	Text emphasis and document titles in body text
Monospace font	User input, commands, code, file and directory names, and system responses (output and messages)
<i>Monospace, italic font</i>	Command-line and code variables
Blue underlined sans serif font text ( <a href="http://www.hp.com">http://www.hp.com</a> )	Web site addresses

## Text Symbols

The following symbols may be found in the text of this guide. They have the following meanings:



**WARNING:** Text set off in this manner indicates that failure to follow directions in the warning could result in bodily harm or death.



**Caution:** Text set off in this manner indicates that failure to follow directions could result in damage to equipment or data.

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**Tip:** Text in a tip provides additional help to readers by providing nonessential or optional techniques, procedures, or shortcuts.

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**Note:** Text set off in this manner presents commentary, sidelights, or interesting points of information.

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## Equipment Symbols

The following equipment symbols may be found on hardware for which this guide pertains. They have the following meanings:



Any enclosed surface or area of the equipment marked with these symbols indicates the presence of electrical shock hazards. Enclosed area contains no operator serviceable parts.

**WARNING:** To reduce the risk of personal injury from electrical shock hazards, do not open this enclosure.

---



Any RJ-45 receptacle marked with these symbols indicates a network interface connection.

**WARNING:** To reduce the risk of electrical shock, fire, or damage to the equipment, do not plug telephone or telecommunications connectors into this receptacle.

---

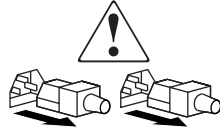


Any surface or area of the equipment marked with these symbols indicates the presence of a hot surface or hot component. Contact with this surface could result in injury.

**WARNING:** To reduce the risk of personal injury from a hot component, allow the surface to cool before touching.

---





Power supplies or systems marked with these symbols indicate the presence of multiple sources of power.

**WARNING:** To reduce the risk of personal injury from electrical shock, remove all power cords to completely disconnect power from the power supplies and systems.

---



Any product or assembly marked with these symbols indicates that the component exceeds the recommended weight for one individual to handle safely.

**WARNING:** To reduce the risk of personal injury or damage to the equipment, observe local occupational health and safety requirements and guidelines for manually handling material.

---

## Rack Stability

Rack stability protects personnel and equipment.



**WARNING:** To reduce the risk of personal injury or damage to the equipment, be sure that:

- The leveling jacks are extended to the floor.
  - The full weight of the rack rests on the leveling jacks.
  - In single rack installations, the stabilizing feet are attached to the rack.
  - In multiple rack installations, the racks are coupled.
  - Only one rack component is extended at any time. A rack may become unstable if more than one rack component is extended for any reason.
-

## Getting Help

If you still have a question after reading this guide, contact an HP authorized service provider or access our web site: <http://www.hp.com>.

## HP Technical Support

Telephone numbers for worldwide technical support are listed on the following HP web site: <http://www.hp.com/support/>. From this web site, select the country of origin.

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**Note:** For continuous quality improvement, calls may be recorded or monitored.

---

Be sure to have the following information available before calling:

- Technical support registration number (if applicable)
- Product serial numbers
- Product model names and numbers
- Applicable error messages
- Operating system type and revision level
- Detailed, specific questions

## HP Storage Web Site

The HP web site has the latest information on this product, as well as the latest drivers. Access storage at: <http://www.hp.com/country/us/eng/prodserv/storage.html>. From this web site, select the appropriate product or solution.

## HP Authorized Reseller

For the name of your nearest HP authorized reseller:

- In the United States, call 1-800-345-1518
- In Canada, call 1-800-263-5868
- Elsewhere, see the HP web site for locations and telephone numbers: <http://www.hp.com>.

# Flexport Upgrade Instructions

1

Read these instructions to upgrade the Edge Switch 2/24 from 8 ports to 16 ports and from 16 ports to 24 ports by installing the 8-flexport upgrade kit for the Edge Switch 2/24.

Each port expansion kit includes eight small form factor pluggable (SFP) transceivers, these upgrade instructions, and a transaction code for obtaining a software license key (feature key). The feature key must be entered using the High Availability Fabric Manager (HAFM), Embedded Web Server (EWS), or Command Line Interface (CLI).

## Unpacking and Inspecting the Optics

Unpack and inspect the optics as follows:

- Inspect the shipping container for damage caused during transit. If a container is damaged, ensure that a representative from the freight carrier is present when the container is opened.
- Unpack the shipping container and inspect each item for damage. Ensure that all items listed on the enclosed bill of materials are included in the container.
- If any items are damaged or missing, contact a Hewlett-Packard authorized service provider or reseller.

## Upgrading the Edge Switch 2/24

This section describes how to upgrade the Edge Switch 2/24 from 8 ports to 16 ports and from 16 ports to 24 ports.

### Upgrading to 16 Ports

Ports 0 through 7 of the Edge Switch 2/24 are populated when you receive it ([Figure 1](#), reference ③).

To upgrade to 16 ports:

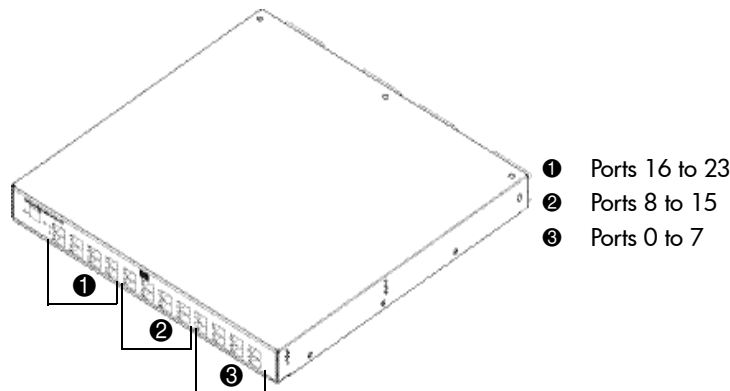
1. Insert 8 new SFP transceivers into ports 8 through 15 ([Figure 1](#), reference ②).
2. If you have no additional ports to upgrade, go to “[Obtaining and Configuring Feature Keys](#)” on page 14. If you want to install additional ports, continue with the “[Upgrading to 24 Ports](#)” on page 13.

### Upgrading to 24 Ports

Ports 0 through 15 should be populated after you have completed the procedure described in “[Upgrading to 16 Ports](#)” on page 13 ([Figure 1](#), reference ② and ③).

To upgrade to 24 ports:

1. Insert 8 new SFP transceivers into ports 16 through 23 ([Figure 1](#), reference ①).



**Figure 1: Edge Switch 2/24 port locations**

2. Continue with “[Obtaining and Configuring Feature Keys](#)” on page 14.

## Obtaining and Configuring Feature Keys

In order to configure the ports you have added, you need to obtain and configure a feature key. The following sections tell you how to obtain and configure the key.

### Obtaining Feature Keys

To obtain the feature key for your flexport upgrade, complete the information requested on the *HP StorageWorks Fibre Channel Switches Entitlement Certificate* for firmware features. This certificate is included in the flexport upgrade kit. Next, send the information on the form to the Hewlett-Packard Authorization Center by using one of the following methods:

	Call the HP Authorization Center	Fax the completed form	E-mail
World Wide Web (24 x 7)	<a href="http://www.webkey.external.hp.com">www.webkey.external.hp.com</a>		
US & Canada 0600-1800 U.S. MST, M-F	(801) 431-1451 (800) 861-2979	(801) 431-3654	Americas_password@cnd.hp.com
Europe 0900-1800 Netherlands local time, M-F	+31-555-384-210	+31-555-434-645	Europe_password@cnd.hp.com
Asia 0600-1700 Japan local time, M-F	+81-03-3227-5289 +81-3-3227-5289 (outside Japan)	+81-03-3227-5289 +81-3-3227-5238 (outside Japan)	Asia_password@cnd.hp.com

The Hewlett-Packard Authorization Center uses the information that you send to create a unique software license key for your Edge Switch 2/24 8-port upgrade. It delivers the license key to you by the same method you use to send your information to the Authorization Center. For example, if you send your information by e-mail, the Authorization Center will send the license key to you by e-mail.

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**Note:** Feature keys are encoded to work with the serial number of the installed switch only. Record the key to re-install the feature if required.  
If the switch fails and must be replaced, obtain new feature keys from the HP Authorization Center using the methods described in section “[Obtaining Feature Keys](#)” on page 14. Please have the serial numbers of the failed and replacement switches.

---

## Configuring the Feature Key

A feature key is an alphanumeric string consisting of both uppercase and lowercase characters. The following is an example of a feature key format:

XxXx-XXxX-xxXX-xX

The total number of characters may vary. The key is case sensitive and must be entered exactly as shown in the previous example, including the dashes.

The following procedure tells you how to configure the feature key using HAFM. If you are using EWS to configure the feature key, refer to online help in the EWS. If you are using the CLI to configure the feature key, refer to the *HP StorageWorks CLI Reference Guide for Directors and Edge Switches*.

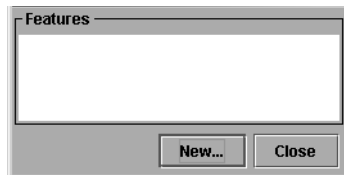
After you have obtained the feature key, access HAFM for the switch to be configured and perform the steps that follow.

---

**Note:** If your firmware is 04.01.02 and later, this procedure can be performed while the switch is online without causing a disruption. If you have firmware earlier than 04.01.02, you must take the switch offline.

---

1. At the **Hardware View**, click **Configure** at the top of the view and select **Features** from the pop-up menu. The **Configure Feature Key** dialog box displays (Figure 2).



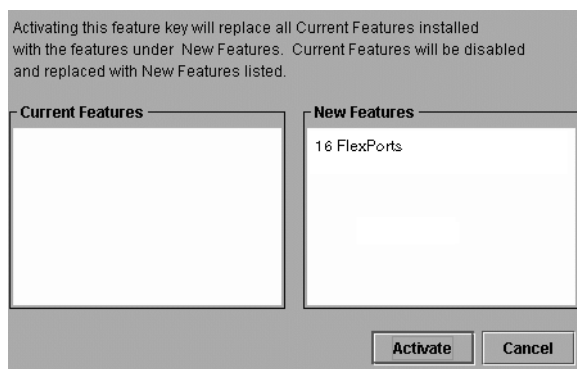
**Figure 2: Configure Feature Key dialog box**

2. Click **New** to add a new feature key. The **New Feature Key** dialog box displays (Figure 3).



**Figure 3: New Feature Key dialog box**

3. In the **New Feature Key** dialog box, type the switch's feature key and click **OK**. The **Enable Feature Key** dialog box displays (Figure 4).



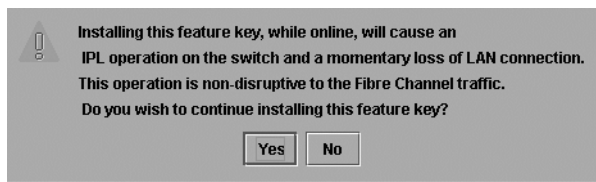
**Figure 4: Enable Feature Key dialog box**

The **Enable Feature Key** dialog box contains a warning, stating that this action will override the current set of features on the switch.

If features are enabled on the switch, they will be listed in the **Current Features** column on the left. The features that come with the new feature key are listed in the **New Features** column on the right. All of the features that are currently active on the switch are included in the list in the **New Features** column.

4. Click **Activate** to activate the new feature key.

A warning dialog box displays (Figure 5).



**Figure 5: Warning Dialog Box**

5. Click **Yes** to enable the feature key. When the feature key is enabled, the switch performs an IPL, during which the Ethernet connection between the HAFM appliance and switch is momentarily interrupted.

When you are finished configuring the switch, you can back up the configuration data.